

Trego County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors 6/14/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 11 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Trego County economy.¹

These 11 sectors have a total direct output of approximately \$72.4 million and support 427 jobs in Trego County. Running the model for all 11 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Trego County Economy								
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product		
Direct Effect	427.4	17.24%	\$13,519,322	11.56%	\$72,369,004	61.87%		
Indirect Effect	204.7	8.26%	\$9,911,879	8.47%	\$17,273,220	14.77%		
Induced Effect	74.9	3.02%	\$4,573,995	3.91%	\$8,516,736	7.28%		
Total Effect	707.0	28.52%	\$28,005,196	23.94%	\$98,158,960	83.92%		

As shown in the above table, agriculture, food, and food processing sectors support **707 jobs**, or **28.52%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$98.2** million, roughly **83.92%** of the economy.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 11 agriculture, food, and food processing sectors is approximately \$28.0 million, or 23.94% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 23.94% of the total economy.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting: http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **288 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Trego County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment				
Sector	Total Employment	Total Output		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	288.3	\$33,815,588		
Support activities for agriculture and forestry	124.0	\$6,058,233		
Grain farming	85.1	\$30,229,174		
All other crop farming	32.1	\$2,321,187		
Wholesale trade	25.7	\$4,730,516		
Real estate	12.9	\$1,580,471		
Dairy cattle and milk production	9.9	\$2,760,722		
Securities and commodity contracts intermediation and brokerage	9.9	\$578,167		
Truck transportation	9.8	\$1,379,567		
Limited-service restaurants	8.3	\$615,255		

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately \$33.8 million to the Trego County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output				
Sector	Total Employment	Total Output		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	288.3	\$33,815,588		
Grain farming	85.1	\$30,229,174		
Support activities for agriculture and forestry	124.0	\$6,058,233		
Wholesale trade	25.7	\$4,730,516		
Dairy cattle and milk production	9.9	\$2,760,722		
All other crop farming	32.1	\$2,321,187		
Owner-occupied dwellings	0.0	\$2,162,752		
Real estate	12.9	\$1,580,471		
Truck transportation	9.8	\$1,379,567		
Farm machinery and equipment manufacturing	2.8	\$1,232,361		

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Trego County economy.

All Agriculture, Food, and Food Processing Sectors				
Sector	Total Employment	Total Output		
Oilseed farming	1.2	\$1,150,069.38		
Grain farming	85.1	\$30,229,174.16		
Fruit farming	0.2	\$11,637.19		
All other crop farming	32.1	\$2,321,187.06		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	288.3	\$33,815,587.66		
Dairy cattle and milk production	9.9	\$2,760,722.29		
Poultry and egg production	0.3	\$199,291.60		
Animal production, except cattle and poultry and eggs	0.7	\$81,747.55		
Bread and bakery product, except frozen, manufacturing	4.8	\$441,664.54		
Farm machinery and equipment manufacturing	2.8	\$1,232,360.93		
Veterinary services	1.9	\$125,562.05		

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Trego County, the retail sector was omitted.